

Short Communication

A NOTE ON RECENT FORAMINIFERA FROM CALANGUTE BEACH SAND, GOA

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Recent foraminifera from beach sands have been subjected to extensive faunistic and ecological studies all over the world but a little work has been done on these micro-organisms from the Indian coasts (Chaudhry and Biswas, 1954; Bhatia, 1956; Bhatia and Bhalla, 1964; Rocha and Ubaldino, 1964a, b; Bhalla, 1968, 1970). Due to present emphasis on the exploration of oil and gas on the off-shore regions of the country, it has become all the more necessary to study Recent foraminifera from Indian coasts for a better understanding of their fossil representatives of these regions which would be helpful to petroleum geologists.

Under the University Grants Commission research project on Recent foraminifera from the West Coast of India, sand samples from Calangute beach (73° 45' 24" : 15° 32' 33"), Goa, were collected in October, 1976, for a detailed study of Recent foraminifera contained therein. The preliminary results obtained are the concern of the present communication while the detailed work is in progress and will be published in due course.

A total of 36 following species of Recent foraminifera were recorded from the Calangute beach sand: *Spiroloculina antillarum*, D'Orbigny, *S. depressa* var. *rotunda* Williamson, *S. tricarinata* Terquem, *S. eximia* Cushman, *Quinqueloculina pseudoreticulata* Parr, *Q. seminulum* Linne, *Q. venusta* Karrar, *Q. vulgaris* D'Orbigny, *Triloculina tetrumilana* (Brady), *T. tricarinata* D'Orbigny, *Cancris auricula* (Fichtel and Moll), *Ammonia amoecens* (Parker and Jones), *A. catesbyanus* (D'Orbigny), *A. papillosus* (Brady), *Asterorotalia dentata* (Parker and Jones), *Pararotalia nipponica* (Asano), *Elphidium advenum* (Cushman), *E. craticulatum* (Fichtel and Moll), *E. crispum* (Linne), *E. indicum* Cushman, *E.* of *E. minutum* (Reuss), *Elphidium* sp., *Nummulites ammonides* (Gronovius), *Globigerina bulloides* D'Orbigny, *Globigerinoides ruber* (D'Orbigny), *Eponides repandus* (Fichtel and Moll), *Eponides* sp., *Poroeponides cribrerepandus* Asano and Uchio, *P. lateralis* (Terquem), *Amphistegina radiata* (Fichtel and Moll), *Cibicides lobatulus* (Walker and Jacob), *C. refulgens* Montfort, *Cibicides* sp., *Nonion bauxanum* (D'Orbigny), *Florilus elongatus* (D'Orbigny) and *F. scaphus* (Fichtel and Moll). Of these, *Ammonia amoecens* and *Pararotalia nipponica* are abundant; *Asterorotalia dentata*, *E. indicum*, *Eponides repandus*, and *Poroeponides cribrerepandus* are frequent; and the remaining species are rare in our material. *Spiroloculina tricarinata* and *Poroeponides cribrerepandus* are being recorded for the first time from the Indian waters. In the Calangute assemblage, 6 species each belong to the families Miliolidae and Elphidilidae, 5 to Rotaliidae, 4 each to

Nubeculariidae and Eponididae, 1 each to Cibicides and Nonionidae. 2 each to Globigerinidae, and 1 each to Discorbidae, Nummulitidae and Amphasteginidae,

The majority of foraminiferal species in the Calangute material are benthonic and belong to typical warm water environment. However, the occurrence of *G. bulloides*, a cold water species of foraminifera in the present assemblage, may be attributed to current action in the region.

The Recent foraminiferal fauna from the Calangute beach was compared with the assemblages from shore sands of the East as well as West coasts of India described by earlier investigators. The qualitative and quantitative studies indicate that the microfauna of the West Coast is rich in the number and frequency of foraminiferal species in comparison to the East Coast assemblage and the two regions, most probably, belong to different faunal realms (*Vide etiam*, "Panikkar and Jayaraman, 1966; Bhalla, 1968, 1970).

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